

Work Order ID 83453

83453

Page 1

Wednesday, April 18, 2012 8:43:25 AM

Item ID: D2573 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle, Aft Out 205
 Start Date: 4/18/2012 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 4/25/2012 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 12/04/10 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2573	Rev E								

100 HAAS CNC VERTICAL MACHINING #1 0.00 12 12/05/06
100
 HAAS 1
 HAAS CNC vertical machine #1

Memo
 Program Batch No. 83453 Double check by: SL 1-Machine Step
 No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine
 Step No 2 per Folio FA051 and inspect per attached Dimension Sheets3-
 Machine Step No 3 per Folio FA051 and insp

110 CONVENTIONAL MILLING MACHINE 0.00 12 12/05/07
110
 Mill Conv
 Conventional Milling Machine

Memo
 Machine keyway as per dwg D2573 & D2574

120 QC2- Inspect parts off machine FAI/FAIB 0.00 12 12/05/07
120
 QC
 Quality Control

Memo

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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 Required Date: 4/25/2012 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	SL	12-05-14					
140 *140* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00							
150 *150* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo START TIME: _____ FINISH TIME: _____ 3200F	0.00 0.00		7-30 8-00					

(12) NG 12-5-14

12x M-L 12/05/17

M121134

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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 Required Date: 4/25/2012 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160						12	0		BL 12-5-17.
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: 433	0.00							
170									
Packaging	Memo	0.00							12/5/17
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

12-5-17

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, April 18, 2012 8:43:29 AM

Page 1

Work Order ID: 83453

83453

Parent Item: D2573

D2573

Parent Item Name: Saddle, Aft Out 205

Start Date: 4/18/2012

Required Date: 4/25/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP: I As Per RevE 06-01-27 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007		Manufactured	No			100	Each	44.0000	1	12			
D6101-007									**			B.A. 12/05/06	
Saddle Billet													

Location

Loc Qty

Loc Code

MAT042

44

79875

16

81994

28

→ 83450

12.0

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	03453
Description: Saddle, Aft Outboard	Part Number:	D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.438	0.443		0.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		0.502	.500	.499	.500		
G	0.257	0.262		0.259	.259	.259	.259		
H	0.375	0.380		0.377	.377	.377	.377		
I	0.490	0.510		0.502	.502	.501	.503		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		0.570	.576	.569	.570		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		0.125	.125	.127	.126		
Q	0.115	0.135		0.135	.135	.135	.135		
R	0.240	0.260		0.252	.250	.251	.252		
S	0.115	0.135		0.122	.124	.126	.124		
T	0.178	0.198		0.188	.188	.188	.188		
U	3.210	3.250		3.230	3.228	3.229	3.229		
V	0.230	0.250		0.238	.241	.240	.240		
W	0.115	0.135		0.124	.128	.126	.122		
X	0.308	0.313		0.310	.310	.309	.310		
Y	0.760	0.765		0.760	.760	.760	.760		
Z	0.352	0.372		0.364	.363	.364	.363		
AA	0.470	0.530		0.500	.500	.500	.500		
AB	0.615	0.635		0.625	.626	.626	.626		
AC	0.053	0.073		0.063	.063	.063	.063		
AD	0.240	0.260		0.246	.247	.247	.247		
AE	1.500	1.520		1.5147	1.5129	1.516	1.5139		
AF	0.115	0.135		0.127	.129	.128	.127		
AG	0.240	0.280		0.280	.280	.280	.278		
AH	0.240	0.260		0.250	.249	.247	.248		
AI	2.000	2.020		2.0077	2.000	2.0034	2.0039		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	<i>smk</i>
Date:	12/05/08

Audited by:	<i>SL</i>
Date:	12-05-14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>[Signature]</i>

DART AEROSPACE LTD	Work Order:	03453
Description: Saddle, Aft Outboard	Part Number:	D2573
Inspection Dwg: D2573 Rev. E		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	15	16	17	18		
A	0.438	0.443		.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.500	.501	.500	.500		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.500	.500	.501	.500		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.568	.569	.568		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.126	.124	.127	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.257	.250	.253	.257		
S	0.115	0.135		.126	.129	.126	.128		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.228	3.228	3.228	3.228		
V	0.230	0.250		.242	.242	.240	.241		
W	0.115	0.135		.128	.127	.127	.126		
X	0.308	0.313		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.364	.364	.363	.364		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.625	.626	.626	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.249	.247	.248	.248		
AE	1.500	1.520		1.518	1.512	1.514	1.513		
AF	0.115	0.135		.128	.128	.128	.128		
AG	0.240	0.280		.280	.280	.280	.280		
AH	0.240	0.260		.250	.250	.249	.249		
AI	2.000	2.020		2.0016	2.002	2.004	2.003		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	<i>anf</i>
Date:	12/05/08

Audited by:	<i>JL</i>
Date:	12-05-14

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
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DART AEROSPACE LTD		Work Order:	83453
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Inspection Dwg: D2573 Rev. E		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2573 Rev. E and record below:

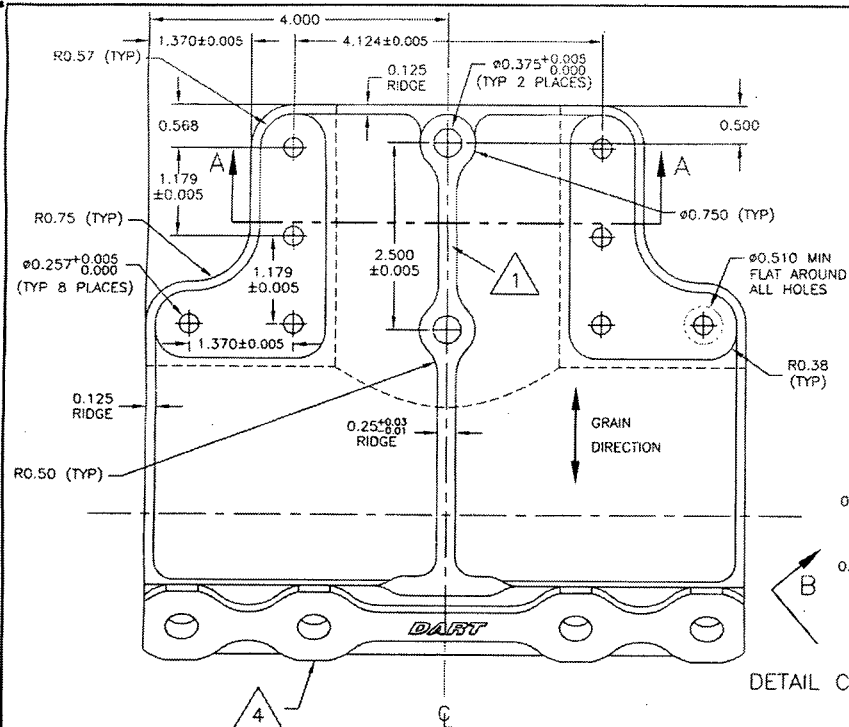
Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				<i>19</i>	<i>210</i>	<i>211</i>	<i>212</i>		
A	0.438	0.443		.441	.441	.441	.441		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.500	.500	.501	.501		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.377	.377	.377	.377		
I	0.490	0.510		.500	.502	.500	.501		
J	1.174	1.184		1.179	1.179	1.179	1.179		
K	0.558	0.578		.568	.570	.568	.569		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.365	1.375		1.370	1.370	1.370	1.370		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	4.119	4.129		4.124	4.124	4.124	4.124		
P	0.115	0.135		.125	.126	.126	.126		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.252	.252	.252	.257		
S	0.115	0.135		.127	.126	.126	.126		
T	0.178	0.198		.188	.188	.188	.188		
U	3.210	3.250		3.230	3.230	3.230	3.230		
V	0.230	0.250		.241	.242	.240	.241		
W	0.115	0.135		.128	.126	.127	.127		
X	0.308	0.313		.310	.309	.309	.309		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.363	.363	.363	.363		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.626	.626	.626	.626		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.248	.249	.249	.248		
AE	1.500	1.520		1.513	1.513	1.514	1.513		
AF	0.115	0.135		.128	.128	.128	.126		
AG	0.240	0.280		.280	.280	.280	.280		
AH	0.240	0.260		.249	.250	.249	.249		
AI	2.000	2.020		2.0025	2.003	2.0035	2.0029		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by:	<i>ony</i>
Date:	<i>12/05/08</i>

Audited by:	<i>JL</i>
Date:	<i>12-05-14</i>

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.26	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
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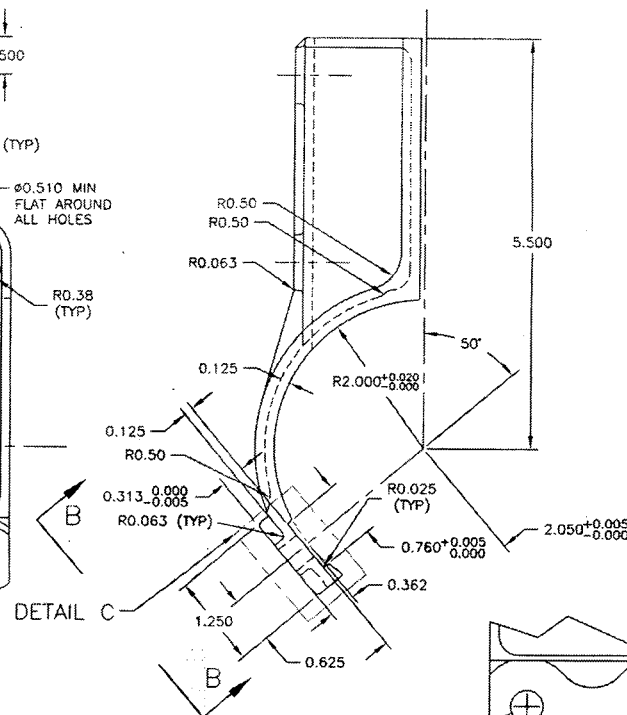
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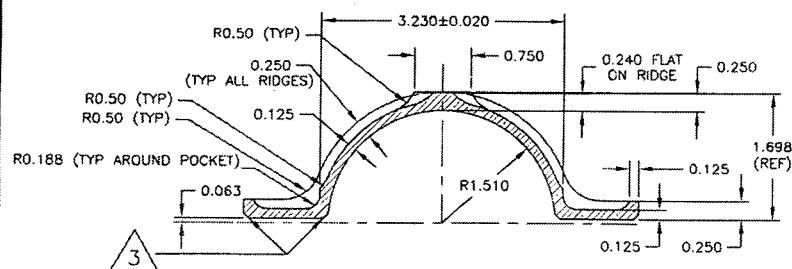
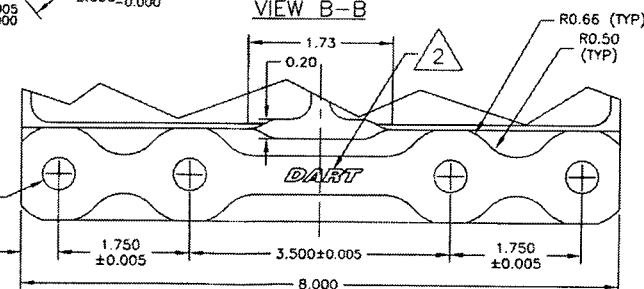
NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12)
(REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER
DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

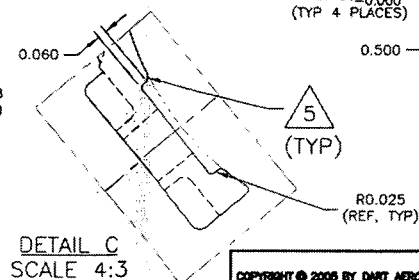
- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL. C)



VIEW B-B






SECTION A-A



DETAIL C
SCALE 4:3

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THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

E	05.07.13	ADD CHAMFER ON RIDGE NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN		 DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA
DS	PH	
CHECKED 	APPROVED 	DRAWING NO D2573
DATE		TITLE OUTER AFT SADDLE
05.07.13		REV. SHEET 1 OF SCAL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

WORK ORDER
NO. 83453 MLJ

12/04/18